

Chapter 7

Animal Care Facilities

Highlights . . .

- Eighty-five percent of research institutions maintain laboratory animal facilities. In 1996, these 659 facilities contained 14,030,000 NASF of animal research space. Two thirds of this space was used for animal housing and one third was used for animal laboratories.
- Eighty-two percent of the animal care research space fully met government regulations on the humane care of laboratory animals. Of the research space that did not meet compliance, 9 percent required limited repair/renovation, while 8 percent required major repair/renovation.
- Eighteen percent of the institutions with animal care research space (120 institutions) scheduled a total of \$265.7 million of either repair/renovation or new construction projects for laboratory animal facilities for fiscal years 1996 and 1997.

Data Considerations

Biomedical research relies on animals. Federal laws and regulations have been enacted to protect animals used in research and to ensure that the space in which they are kept is adequate (42 U.S.C. 289d and 9 CFR Part 3). Research-performing institutions have indicated that these regulations have placed a significant burden on them. Thus, beginning with the 1992 survey cycle, the facilities' survey included questions to determine the amount of laboratory space dedicated to animal facilities as well as the costs of repairing/renovating these facilities and constructing new ones.

Institutions reported aggregated space estimates for all animal care facilities at the institution and did not provide separate space estimates for each field. Therefore, the analysis does not describe animal care facilities used specifically for biomedical research. It is likely, however, that animal care facilities were largely concentrated in three fields: agricultural sciences, biological sciences, and medical sciences and that the biomedical sciences included a substantial proportion of all animal care facilities.

Findings

Amount of Space

Eighty-five percent, or 659 of the 780 institutions surveyed, contained laboratory animal facilities subject to governmental regulations (Table 7-1). In total, institutions reported 14,030,000 NASF of laboratory animal facilities. Of that space, institutions devoted 66 percent (9,234,000 NASF) to animal housing and 34 percent to animal laboratory space.

Colleges, universities, and medical schools represented 74 percent of the institutions with laboratory animal facilities and accounted for 87 percent of the total animal research space. Research organizations represented 13 percent of the institutions with laboratory animal facilities and occupied 8 percent of all animal research space. Hospitals also represented 13 percent of the institutions with laboratory animal facilities but only occupied 5 percent of the total animal research space.

Public colleges, universities, and medical schools made up 44 percent of the institutions with animal facilities — but contained 68 percent of the total space.¹ In contrast, private colleges, universities, and medical schools accounted for 31 percent of institutions with animal care facilities but contained only 19 percent of the total animal care NASF space.

¹It is likely that the agricultural sciences account for much of the laboratory animal space in public colleges, universities, and medical schools. Land grant universities are public universities and tend to have agricultural programs.

There was little difference across types of institutions in the proportions of animal research space devoted to housing and to laboratories.

Table 7-1
Amount and distribution of space for laboratory animal facilities,
by institution type and control: 1996¹

INSTITUTION TYPE	Institutions with laboratory animal facilities		Total animal research space		Animal housing		Animal laboratory	
	Number	Percentage of institutions	Total [NASF in thousands]	Percentage of total animal research space	Total [NASF in thousands]	Percentage of total animal research space	Total [NASF in thousands]	Percentage of total animal research space
Total	659	100%	14,030	100%	9,234	66%	4,796	34%
Colleges, universities, and medical schools ¹	490	74	12,213	87%	8,046	67%	4,167	34%
Public	287	44	9,476	68%	6,188	65%	3,288	34%
Private	203	31	2,738	19%	1,858	68%	879	34%
Research organizations	85	13	1,109	8%	723	65%	386	34%
Hospitals	84	13	707	5%	464	66%	243	34%

¹Figures for academic institutions include all laboratory animal facilities, without regard to field.

KEY: NASF = Net assignable square feet

NOTES: The data refer to institutions reporting any space in laboratory animal facilities that are subject to government regulations concerning the humane care and use of laboratory animals. Because of rounding, components may not add to totals.

SOURCE: National Institutes of Health, *The Status of Biomedical Research Facilities: 1996*, Bethesda, MD, 1997

Condition of Research Space

Institutions report that 82 percent of current animal care research space fully met government regulations in 1996 (Table 7-2). Relatively small amounts of the total research space needed limited repair/renovation or major repair/renovation, 9 percent and 8 percent, respectively. All types of institutions reported high proportions of space meeting full government regulations ranging from 79 percent at public colleges, universities and medical schools to 93 percent at hospitals.

Table 7-2

**Percentage of animal care research space meeting government regulations by
institution type and control: 1996¹**

INSTITUTION TYPE	Fully meets government regulations	Needs limited repair/renovation to meet government regulations	Needs major repair/renovation to meet government regulations
Total	82%	9%	8%
Colleges, universities, and medical schools ¹	82%	10%	9%
Public	79%	10%	11%
Private	91%	7%	2%
Research organizations	85%	11%	4%
Hospitals	93%	5%	1%

¹Figures for academic institutions include all laboratory animal facilities, without regard to field.

NOTES: The data refer to institutions reporting any space in laboratory animal facilities that are subject to government regulations concerning the humane care and use of laboratory animals. Because of rounding, components may not add to totals.

SOURCE: National Institutes of Health, *The Status of Biomedical Research Facilities: 1996*, Bethesda, MD, 1997

Repair/Renovation and Construction

Scheduled for 1996 and 1997

Eighteen percent of the 659 institutions containing laboratory animal facilities had repair/renovation or construction projects scheduled to start in fiscal years 1996-1997 (Table 7-3). Research organizations were more likely to undertake laboratory animal capital projects (25 percent) than hospitals (6 percent).

Table 7-3
Number of institutions with scheduled repair/renovation or construction projects on laboratory animal facilities, by institution type and control: 1996¹

INSTITUTION TYPE	Institutions with scheduled projects for 1996		Total cost	
	Number	Percentage of institutions with facilities	Dollars [millions]	Percentage of total cost
Total	120	18%	265.7	100%
Colleges, universities, and medical schools ¹	94	19%	247.4	93%
Public	44	15%	188.4	71%
Private	50	25%	58.9	22%
Research organizations	21	25%	13.7	5%
Hospitals	5	6%	4.5	2%

¹Figures for academic institutions include all laboratory animal facilities, without regard to field.

NOTES: The data refer to institutions reporting any space in laboratory animal facilities that are subject to government regulations concerning the humane care and use of laboratory animals. Because of rounding, components may not add to totals.

SOURCE: National Institutes of Health, *The Status of Biomedical Research Facilities: 1996*, Bethesda, MD, 1997

The total cost of scheduled capital projects for laboratory animal facilities in fiscal years 1996-1997 was \$265.7 million. Colleges, universities, and medical schools accounted for 93 percent of all scheduled capital projects (\$247.4 million). Research organizations accounted for 5 percent of the scheduled capital projects (\$13.7 million) and hospitals accounted for 2 percent (\$4.5 million).

Institutions with laboratory animal facilities were more likely to have scheduled repair/renovation projects than new construction. Fourteen percent of all institutions with laboratory animal facilities had scheduled repair/renovation projects and six percent had scheduled new construction (Table 7-4). Construction costs, however, exceeded repair/renovation costs. The total estimated cost for scheduled construction was \$174.7 million; the estimated repair/renovation cost was \$91 million.

Similar amounts of NASF were represented by scheduled construction and repair/renovation to animal research facilities. Whereas construction accounted for 695,435 NASF of either new or replaced space, repair/renovation represented 699,476 NASF (Table 7-5). Approximately five percent of all animal research space was scheduled for repair/renovation in 1996.

Table 7-4
**Scheduled construction and repair/renovation for laboratory animal
facility improvement by institutional type: 1996-1997**

INSTITUTION TYPE	Scheduled construction			Scheduled repair/renovation		
	Number of institutions	Percent of institutions	Cost (in millions)	Number of institutions	Percent of institutions	Cost (in millions)
Total	41	6%	174.7	90	14%	91.0
Colleges, universities, and medical schools	31	6%	164.1	72	15%	83.3
Research organizations	9	11%	8.1	14	16%	5.6
Hospitals	1	1%	2.5	4	5%	2.0

NOTES: The data refer to institutions reporting any space in laboratory animal facilities that are subject to government regulations concerning the humane care and use of laboratory animals. Because of rounding, components may not add to totals.

SOURCE: National Institutes of Health, *The Status of Biomedical Research Facilities: 1996*, Bethesda, MD, 1997

Table 7-5
NASF scheduled for construction and repair/renovation of laboratory animal facilities by institutional type: 1996-1997

INSTITUTION TYPE	Construction	Repair/renovation
Total	695,435	699,476
Colleges, universities, and medical schools	644,774	531,821
Research organizations	43,055	159,301
Hospitals	7,606	8,354

NOTES: The data refer to institutions reporting any space in laboratory animal facilities that are subject to government regulations concerning the humane care and use of laboratory animals. Because of rounding, components may not add to totals.

SOURCE: National Institutes of Health, *The Status of Biomedical Research Facilities: 1996*, Bethesda, MD, 1997
